

## REMARKS

Reconsideration of this application, as amended, is respectfully requested.

Claims 1-3, 5-19, 25-37, and 39 are currently pending in the application, with Claims 1, 8, 11, 25, 29, and 37 being independent. As indicated above, Claims 5, 6, and 39 have been amended, and Claims 4, 20-24, 38, and 40-42 have been cancelled without prejudice. It is gratefully acknowledged that the Examiner has found allowable subject matter in Claims 5, 6, 10, 15-17, 26, 30-35, 39, and 42.

In the Office Action, the Examiner has rejected the claims as follows:

- Claims 1-42 on the ground of non-statutory obviousness type double patenting as being unpatentable over Claims 1-30 of *Huh et al.* (U.S. 6,782,271), which is the parent of the present application;
- Claims 4, 21-24, 38, and 41 on the ground of statutory double patenting in view of the claims of *Huh*;
- Claims 1-3, 7, 8, 11-14, 18, 25, 27, 29, and 32 under 35 U.S.C. § 103(a), as being unpatentable over *Lomp et al.* (U.S. 5,991,329) and further in view of *Cudak et al.* (U.S. 6,253,063), *Souissi et al.* (U.S. 5,850,605), and *Gardner et al.* (U.S. 5,857,147);
- Claims 9, 28, and 26 under 35 U.S.C. § 103(a), as being unpatentable over *Lomp* in view of *Cudak*, *Souissi*, and *Gardner*, further in view of *Ahn et al.* (U.S. 6,272,124); and
- Claims 37 and 40 under 35 U.S.C. § 103(a), as being unpatentable over *Lomp* in view of *Cudak*, *Souissi*, and *Gardner*, further in view of *Bender et al.* (U.S. 6,556,549).

Additionally, as indicated above, the Examiner has objected to Claims 5, 6, 10, 15-17, 26, 30-35, 39, and 42 as being dependent upon a rejected base claim, but being allowable if rewritten in independent form including all the limitations of the base claims.

Regarding the rejection of Claims 1-42 on the ground of non-statutory obviousness type double patenting as being unpatentable over Claims 1-30 of *Huh*, a terminal disclaimer is enclosed herewith, which is believed to overcome this rejection. Accordingly, it is respectfully submitted that the rejection of Claims 1-42 on the ground of non-statutory obviousness type double patenting as being unpatentable over Claims 1-30 of *Huh* be withdrawn.

Regarding the rejection of Claims 4, 21-24, 38, and 41 on the ground of statutory double patenting in view of the claims of *Huh*, as indicted above, these claims have been cancelled without prejudice. Accordingly, it is respectfully submitted that the rejection of Claims 4, 21-24, 38, and 41 on the ground of statutory double patenting in view of the claims of *Huh* is moot.

As indicated above, the Examiner has rejected independent Claims 1, 8, 11, 20, 25, 29, 37, and 40 under 35 U.S.C. § 103(a), as being unpatentable over *Lomp* and further in view of *Cudak*, *Souissi*, and *Gardner*. However, as previously argued in the parent application, it is respectfully submitted that the Examiner is incorrect.

Regarding the rejection of independent Claims 1, 11, 25, and 29, which the Examiner has rejected under 35 U.S.C. § 103(a), as being unpatentable over *Lomp* and further in view of *Cudak*, *Souissi*, and *Gardner*, Claims 1, 11, 25, and 29 each disclose determining the forward data rate by matching a measured C/I with a reference C/I based on a data rate of packet data. The Examiner admits that *Lomp* is silent on a forward data rate, determining a forward data rate by matching the measured C/I with a reference C/I based on a data rate of packet data, and transmitting the determined forward data rate, which it appears the Examiner asserts are taught in *Cudak*, *Souissi*, and *Gardner*. More specifically, the Examiner asserts that *Cudak* teaches modifying an initial data rate based on the difference level of an interference condition, which the Examiner asserts reads on

“determining a data rate” since *Cudak* will change the data rate based on interference. Further, the Examiner cites the title and abstract of *Gardner* as teaching determining a data rate in a communication system based on forward and reverse link usage. The Examiner then cites *Souissi*, asserting that this teaches sending data based upon selecting a transmitter that is associated with a lowest C/I chosen from C/I values that exceed a C/I threshold. Finally, the Examiner asserts it would be obvious to “modify *Lomp*, such that the data rate can be determined based upon comparison of the measured C/I value with a reference C/I value and then transmitting the forward data rate in the reverse channel, to provide means for power and data rate control based upon C/I levels as the mobile roams.” However, it is respectfully submitted that the Examiner is incorrect.

More specifically, Applicants can find no section of *Cudak*, *Souissi*, and *Gardner* that teach “determining a forward data rate by matching the measured C/I with a reference C/I based on a data rate of packet data.” Further, it is respectfully submitted that the combination of these references would not teach this recitation.

*Souissi* discloses using a C/I in a process of determining a selected transmitter for transmitting a message in the abstract. However, *Souissi* fails to disclose the feature of determining a forward data rate as disclosed in the present invention. *Cudak*, col. 2, lines 18-23, recites “[t]he selected initial data rate according to an aspect of the invention is based on a level of carrier to interference (ratio) condition determined by access terminal 110 at the time when the initial data rate was selected by access terminal 110. Moreover, the determined difference level of interference condition is determined by base station 107.” As shown, *Cudak* fails to disclose determining a forward data rate by matching the measured C/I with a reference C/I as is recited in the present claims. Further, *Gardner* fails to disclose this feature of the present invention.

Therefore, it is respectfully submitted that none of the references cited by the Examiner, either alone or combination, teach or suggest determining a forward data rate by matching the measured C/I with a reference C/I. Accordingly, it is respectfully requested that the rejection of independent Claims 1, 11, 25, and 29 under 35 U.S.C. § 103(a), as being unpatentable over *Lomp* and further in view of *Cudak*, *Souissi*, and *Gardner* be withdrawn.

Additionally, it is respectfully submitted that the Examiner has failed to provide a proper explanation of the rejection under 103(a), as is required by MPEP 2141. III, which requires:

The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Court quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), stated that "[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR*, 550 U.S. at \_\_\_, 82 USPQ2d at 1396. Exemplary rationales that may support a conclusion of obviousness include:

- (A) Combining prior art elements according to known methods to yield predictable results;
- (B) Simple substitution of one known element for another to obtain predictable results;
- (C) Use of known technique to improve similar devices (methods, or products) in the same way;
- (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;
- (E) "Obvious to try" - choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;
- (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations are predictable to one of ordinary skill in the art;

(G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention. See MPEP § 2143 for a discussion of the rationales listed above along with examples illustrating how the cited rationales may be used to support a finding of obviousness.

As shown above, the Examiner has merely provided a conclusory statement that it would be obvious to modify *Lomp*. Further, in this conclusory statement, the Examiner does not even mention how *Lomp* would be modified by the cited references, but instead states the operations of the rejected claims. The Examiner merely states what is allegedly taught by each reference, but provides no explanation as to how they are combined, or why one would be motivated to do so. Therefore, it is respectfully submitted that the Examiner has improperly rejected Claims 1, 11, 25, and 29 under 35 U.S.C. § 103(a), as being unpatentable over *Lomp* and further in view of *Cudak*, *Souissi*, and *Gardner*, and it is respectfully requested that the rejection be withdrawn.

With regards to independent Claim 8, which the Examiner also has rejected under 35 U.S.C. § 103(a), as being unpatentable over *Lomp* and further in view of *Cudak*, *Souissi*, and *Gardner*, the Examiner is asserting that *Lomp* teaches “receiving margin information over a reverse link.” However, it is respectfully submitted that the Examiner is incorrect.

More specifically, the Examiner cites the abstract of *Lomp*, asserting that it discusses ARPC (starting at “In the ARPC system.....”). However, this section appears to recite that the BS measures a reverse signal-to-noise ratio of each of the respective channel information signals and generates a reverse channel error signal, which includes a measure of the uncorrelated noise in the channel and a measure of the error between the respective reverse signal-to-noise ratio and a predetermined signal-to-noise ratio. That is, the base station measures these values. Claim 8, however, recites that the BS receives the margin information over the reverse link, not determining them by measuring the reverse link.

Moreover, independent Claim 8 recites “receiving the forward data rate and margin information for the power control together over a reverse link and decreasing the transmission power level using the received margin information.” *Lomp, Cudak, Souissi*, and *Gardner* fail to disclose these features. In general, if the transmission rate increases, the required transmission power is also increased. Furthermore, the present invention is applied to the mobile communication system in which the transmission rate is varied by the access terminal. In this system, the present invention has an effect of decreasing the remaining transmission power in the mobile communication system because the access terminal of the present invention transmits the margin information for the power control together with the forward transmission rate whenever the forward transmission rate is determined. This effect of the present invention cannot be expected from *Lomp, Cudak, Souissi*, and *Gardner*.

Therefore, it is respectfully submitted that none of the references cited by the Examiner, either alone or combination, teach or suggest receiving the forward data rate and margin information for the power control together over a reverse link and decreasing the transmission power level using the received margin information. Accordingly, it is respectfully requested that the rejection of independent Claim 8 under 35 U.S.C. § 103(a), as being unpatentable over *Lomp* and further in view of *Cudak, Souissi*, and *Gardner* be withdrawn.

Additionally, for similar reasons as described above, it is respectfully submitted that the Examiner has failed to provide a proper explanation of the rejection under 103(a) for Claim 8, as is required by MPEP 2141. III. Again, the Examiner merely states what is allegedly taught by each reference, but provides no explanation as to how they are combined, or why one would be motivated to do so. Therefore, it is respectfully submitted the Examiner improperly rejected Claim 8 under 35 U.S.C. § 103(a), as being unpatentable over *Lomp* and further in view of *Cudak, Souissi*, and *Gardner*, and it is respectfully requested that the rejection be withdrawn.

With regards to Claim 37, which the Examiner has rejected under 35 U.S.C. § 103(a), as being unpatentable over *Lomp* and further in view of *Cudak, Souissi*, and *Gardner*, and further in view of *Bender*, it is respectfully submitted that the Examiner is incorrect. The Examiner cites *Lomp*

as disclosing a multiplexer for TDM of a forward data rate and margin information, citing FIG. 5a, #525-527. Further, the Examiner cites *Lomp* as disclosing encoders and spreaders, and again cites FIG. 5a, #525-527. However, FIG. 5a, elements 525-527, identify amplifiers, not a multiplexer, encoders, or spreaders. Further, the combination of *Lomp*, *Cudak*, *Gardener* and *Souissi* fails to disclose time-division-multiplexing and transmitting the forward data rate and the margin information for the power control in the view of the transmitter (namely, the access terminal) as recited in independent Claim 37. Additionally, these elements are not taught in *Bender* either, as *Bender* merely discloses multiplexing and transmitting the RRI channel indicating the references transmission rate.

Therefore, it is respectfully submitted that the Examiner is incorrect in rejecting Claim 37 under 35 U.S.C. § 103(a), as being unpatentable over *Lomp* and further in view of *Cudak*, *Souissi*, and *Gardner*, and further in view of *Bender*, and it is respectfully requested that the rejection be withdrawn.

Regarding the rejection of Claims 9, 28, and 36 under 35 U.S.C. § 103(a), as being unpatentable over *Lomp* in view of *Cudak*, *Souissi*, and *Gardner*, further in view of *Ahn*, *Ahn* is assigned to Samsung Electronics Co., Ltd. *Ahn* also qualifies as 102(e) prior art, as its publication date (also the issue date) is August 21, 2001, which is after the effective filing date of the present application, i.e., June 27, 2001, which is also assigned to Samsung Electronics Co., Ltd. Accordingly, as *Ahn* and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to Samsung Electronics Co., Ltd., it is respectfully submitted that *Ahn* is not prior art. 35 U.S.C. § 103 recites:


(c)(1) Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Therefore, the rejection of Claims 9, 28, and 36 under 35 U.S.C. § 103(a), as being unpatentable over *Lomp* in view of *Cudak*, *Souissi*, and *Gardner*, further in view of *Ahn*, is improper and it is respectfully requested that the rejection be withdrawn.

Based on the arguments and amendments above, it is respectfully submitted that independent Claims 1, 8, 11, 25, 29, and 37 are in condition for allowance. Further, without conceding the patentability *per se* of dependent Claims 2, 3, 5-7, 9, 10, 12-19, 26-36, and 39, these claims are likewise believed to be in condition for allowance based upon their dependence from independent Claims 1, 8, 11, 25, 29, and 37, respectively.

In view of the preceding amendments and remarks, it is respectfully submitted that all pending claims, namely Claims 1-3, 5-19, 25-37, and 39, are in condition for allowance. Should the Examiner believe that a telephone conference or personal interview would facilitate resolution of any remaining matters, the Examiner may contact Applicants' attorney at the number given below.

Respectfully submitted,



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